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U. S. Geological Survey
1884*

THE HAWAIIAN ISLANDS AND PEOPLE.

A LECTURE

DELIVERED AT THE

U. S. NATIONAL MUSEUM

UNDER THE AUSPICES OF THE SMITHSONIAN INSTITUTION AND OF
THE ANTHROPOLOGICAL AND BIOLOGICAL SOCIETIES
OF WASHINGTON.

FEBRUARY 9TH, 1884,

Russell BY
CAPT. C. EDWARD DUTTON, U. S. A.,
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THE HAWAIIAN ISLANDS AND PEOPLE.

LADIES AND GENTLEMEN:

The Hawaiian Islands are the summits of a gigantic submarine mountain range. If the waters of the Pacific were removed from their vicinity we might behold a range of mountains as long as our Appalachian system, from Lake Champlain to Chattanooga and quite as wide, with summits five times as high as Mt. Washington. The summits of Mauna Loa and Mauna Kea are nearly 14,000 feet above the ocean, and their bases are from 15,000 to 18,000 feet beneath it. Referred to the bottom of the ocean those mountains are higher than the Himalayas. Standing upon the northeastern coast of Hawaii the crest of Mauna Kea is less than twenty miles away, and is nearly three miles above us. At a distance of about thirty miles at sea the ocean floor is about three and a half miles below us. I am not aware of any other place in the world where, along a line less than fifty miles in length, may be found a difference in altitude of more than six miles.

The Hawaiian group consists of four larger and four smaller islands. The largest island is named Hawaii. It has a length of about ninety miles and a width of seventy miles. Its area is very nearly 4,000 square miles, being a

little less than two-thirds of the area of the entire group. It is not, however, the most populous, for that distinction belongs to the island of Oahu, on which is situated the principal town and capital, Honolulu, which is the center of trade and the seat of the government.

Only a small portion of each island is capable of sustaining a dense population. The interiors are mountainous and generally rough, craggy, and cut with profound gorges of the wildest description. The habitable portions are near the sea-coast, forming a ring around each island; but only a part of each ring is habitable or cultivable. Some portions are intensely arid and barren; others are covered with recent floods of lava, and still others are bounded by lofty rocky coasts, and trenched with ravines so deep and abrupt that access is difficult. Generally speaking, the proportion of habitable area is singularly small. But those portions which are well favored are probably capable of sustaining as dense a population as any tracts in the world.

The climate of these islands is the climate of Paradise. It is never hot, and, except at considerable altitudes, it is never cold. Rarely has the thermometer been known to reach 90° on the sea-coast, or to fall below 65° . The temperature in most localities may be averaged the year round as varying between 75° and 85° . But while the temperature of any given locality is very uniform, there is wonderful variety in the climate as we pass from one place to another. Indeed, there are almost as many climates as there are square leagues. As a rule the windward or eastern sides are very rainy and the leeward sides very dry. On the eastern coast of Hawaii the annual rainfall varies from

150 to 250 inches. On the northwest coast of the same island it is probably less than the twentieth part of those amounts. The islands being situated within the trade-wind belt, the wind blows constantly from the east and northeast during the greater part of the year, and is only subject to brief interruptions during midwinter. Violent storms occur only in the winter time, and these, coming once or twice a year from the southwest, are known as konas, which means in the native language the southwest. During a stay of six months on the islands I only heard a single peal of thunder.

These islands are all of volcanic origin. They are composed of basaltic lavas, and no other rocks are found there excepting a few consolidated coral sands, which are remnants of old sea-beaches upheaved from 50 to 200 feet. In the two westerly islands the volcanic activity has long been extinct. Most of the ancient craters have been obliterated, and the volcanic piles built up during the periods of activity have been greatly ravaged and wasted by subsequent erosion. Next to the plateaus and cañon country of the Rocky Mountain region, it would be difficult to find anywhere more impressive and suggestive examples of the wasting and slow destruction of the land than those presented by these islands. We find there grand illustrations of the two methods by which the general process of erosion accomplishes its work. First, is the action of the rains, followed by the decomposition of the massive rocks and their conversion into soil, and also the action of running water and general decay of the rock masses, resulting in the formation of ravines and mountain gorges of the most impos-

ing grandeur; secondly, we find the slow but incessant inroads made by the waves of the ocean upon a sea-coast, gradually wearing back the cliffs and slowly paring away the rocky shore, until, after the lapse of thousands of years, the sea has eaten its way several miles into the land. Thus we have on the one hand very striking examples of one way in which mountains are built, and we have on the other hand equally striking examples of the ways in which those mountains are destroyed.

Travelers in the lofty volcanic islands of the Pacific have frequently noted with some surprise the singularly sharp, angular, abrupt features of their mountain scenery. It is very impressive in the Fijis and Samoa, in the Ladrone and Caroline, and Society groups. But none of them rival in wildness and grandeur the still loftier islands of Hawaii. Gorges little inferior to Yosemite in magnitude are rather numerous. But in a certain sharpness of detail and animation in the sculpture they are quite unique. The island of Kauai and the western portion of the island of Maui consist of old volcanic piles as high as Mt. Washington, and much broader and longer. They are literally sawed to pieces by many immense cañon-like gorges, which cut them to their foundations. Over all is spread a mantle of tropical vegetation, in comparison with which the richest verdure of our temperate zone is but the garb of poverty. Whoever reads Shakespeare's *Tempest* and visits the Bermudas will be disenchanted from some of the most pleasing illusions of the play. But, if Shakespeare could only have known the eastern shores of Maui or Hawaii and made them the scenes of his play, it would have had, if possible, another claim to immortality.

This wealth of verdure and splendor of scenery usually occur upon the windward sides of the islands, for upon those sides are found the cause which produces them. This cause is the copious rainfall brought by the perpetual trade winds. Nothing can be more pleasing to the lover of beautiful scenery than a ride along the windward coasts of Maui and Hawaii. The land terminates in cliffs, varying from 200 to 500 feet in height, plunging down almost vertically into the Pacific. The long heavy swell driven for thousands of miles before the trade-wind breaks with great force against these iron walls. The surface above slopes upwards towards the mountainous interior, at first with a gentle acclivity which becomes steeper inland, and at length precipitous. This platform is gashed at short intervals by true cañons, which head far up the mountain slopes, and open seawards in the great terminal wall. A mile or two inland from the brink of the cliff-bound shore is a forest so dense that it can be penetrated only by hewing a way through it or following a path already hewn. To describe the glories of this tropical vegetation is impossible. Only those who have beheld it can conceive of its splendor and luxuriance. Yet there is one unrivaled feature of the island vegetation, which has no parallel elsewhere than in the Pacific and Austral islands, and which may be mentioned. This is the ferns. There are more than 300 species of them in the Hawaiian Islands, and the most conspicuous are tree-ferns, which grow in amazing abundance and sumptuousness. They often cover the sides of the ravines, forming a thicket which is quite impenetrable, and become a mantle of green velvet, so deep, rich, and exquisitely patterned that it makes an imperial robe seem ridiculous.

But there are contrasts. There are portions of the islands where the features have at first sight no more in common with those just spoken of, than if they belonged to another planet. The beautiful or grand scenery is found in those parts where the volcanic activity has long been dormant. The contrasted portions are those where the volcanoes are still in action, or have recently put out their fires.

The southern half of the great island Hawaii is covered by the two grandest volcanoes in the world—Mauna Loa and Kilauea. The great central pile is Mauna Loa, which is certainly the monarch of modern volcanoes. Its name signifies the Great Mountain. No other in the world approaches it in the vastness of its mass or in the magnitude of its eruptive activity. There are many volcanic peaks higher in air, but these are planted upon elevated platforms of stratified rock, where they appear as mere cones, of greater or less size. Regarding the platforms on which they stand as their true bases, the cones themselves, and the lavas which have emanated from them, never approach the magnitude of Mauna Loa. Etna and all its adjuncts are immeasurably inferior; while Shasta, Hood, and Ranier, if melted down and run together into one pile, would still fall much below the volume of the island volcano. In the greatness of its eruptions, Mauna Loa is also without a rival. Some of the volcanoes of Iceland have been known to disgorge at a single outbreak volumes of lava quite equal to them. But in that island such extravasations are infrequent, and a century has now elapsed since any such have been emitted. The eruptions of Mauna Loa are all of great volume, and occur irregularly, with an average in-

terval of about eight years. Any one of its moderate eruptions represents more lava than Vesuvius has outpoured since the last days of Pompeii. The great flow of 1855 would nearly have built Vesuvius, and those of 1859 and 1881 were not greatly inferior.

The Hawaiian volcanoes are in some respects abnormal. The most distinctive of their characteristics is the singularly quiet and undemonstrative methods of their eruptions. Rarely are these portentous events attended by any of that explosive action which is manifested by all other volcanoes. In only one or two instances within the historic period have they been accompanied by earthquakes and subterraneous rumblings. The vast jets of steam blown miles high, hurling cinders and lapilli far and wide, and filling the heavens with vapor, dust, and ashes, have never been observed here. Some action of the sort is indeed represented sometimes, but only in a feeble way. Ordinarily the lava spouts forth in stupendous quantities, but as quietly as water from a fountain. So mild are the eruptive forces that the observer may stand to the windward of one of these mighty fountains, and so near it that the heat will make the face tingle, yet without danger. Usually the outbreak takes place without warning, and even without the knowledge of people in the vicinity, who first become aware of it at nightfall, when the whole heavens are aglow with the reflected light, and the fiery fountains are seen playing. As the news spreads, hundreds of people flock to it to witness the sublime spectacle, and display as much eagerness to approach the scene of an eruption as the people of other countries show to get away from one.

All this is in strongest contrast with the ordinary volcano. At the other extreme is such an eruption as that which happened last August at Krakatoa, in the Straits of Sunda. With the published details of this catastrophe you are all familiar. Appalling as it was, the eruption of Sumbawa, on the Island of Sumatra, in 1815, must have been—if we can rely upon the accounts of it—even more energetic and destructive. The eruption of Coseguina, in Nicaragua, in 1835, appears to have been of the same character, or upon a scale quite equal; while once or twice in a century Cotapaxi shakes the chain of the Andes through half its length, fills the sky with dust, and converts noonday into midnight for a hundred miles around. The eruptions of *Ætna* have all been on a smaller scale, but still sufficient to fill all Sicily with terror. *Vesuvius* is usually regarded as a very obstreperous vent, but its performances are mere Fourth of July fire-works in comparison with these Day-of-Judgment proceedings at Sumbawa, Krakatoa, and Cotapaxi.

The explosive agent in these terrible convulsions is steam. In their original seat, miles deep in the earth, the lavas contain considerable quantities of water; but the condition of this water is such as we have, at the surface of the earth, no experience with, except as we observe it in volcanoes. It is water red hot, or even yellow hot, and under a pressure hundreds of times greater than that of the steam in a locomotive boiler—a pressure probably comparable to that exerted by gun-powder in a powerful cannon. Under the enormous pressure, occurring at a depth of several miles within the earth, water is absorbed by the lavas in much the same way as

water itself absorbs ammonia gas, or as wine absorbs carbonic acid. When the lavas rise to the surface where the pressure is removed their explosive energy becomes terrible. The steam is given off as the uncorked bottle of wine gives off its gas, only a thousand times more violently and energetically. So densely charged with vapor of water are some lavas that when, as in the case of Krakatoa, a vent is found, the explosive energy becomes so prodigious that the lava is blown into fine dust and dissipated in the surrounding atmosphere. Although this extreme of explosive activity is far too common for the comfort and safety of the human race, it is by no means the most frequent. The more ordinary type of volcano is one in which the explosiveness is not so intense as to blow the whole of the ejected matter into impalpable dust, but blows it into pellets termed lapilli. These grains of lapilli are of all sizes, from that of a kernel of wheat up to those of cannon balls, and sometimes weighing a hundred tons or more. With a majority of volcanoes, whether active or extinct, the greater part of the material ejected is cast into the air in this fragmental form. Falling back around the orifice, they build up a fairly regular cone, with a cup on the summit. This is termed a cinder cone. Most of the volcanic piles of the world are crowned with cinder cones, the principal bulk of which consists of lapilli and scoriaceous lumps, with some massive portions of flowing lava streams mixed in. It is probable that quite half of the volcanic material now visible upon the globe consists of accumulations of such fragmental matter.

To this general method of extravasation Mauna Loa and

Kilauea are very remarkable exceptions. They consist almost wholly of massive sheets and floods of lava. On Mauna Loa there are but the most insignificant traces of fragmental products, and on Kilauea there are only a dozen or two of small cinder cones. The lavas of these great volcanoes flowed quietly out in enormous deluges, running sometimes for months, or even a whole year, with only the least possible signs of explosive action throughout the entire duration of the flows.

One consequence of this quiet method of eruption has been to give to these colossal piles a wholly exceptional form among volcanoes. Instead of a huge cone crowning the apex of Mauna Loa, its summit is nearly a flat plain, five and a half miles long and nearly four miles wide. Within this plain is sunken a pit three miles long, two miles wide, and a thousand feet in depth. In the floor of this pit, at certain times, may be seen a lake of red hot liquid lava, varying in size from time to time, but occasionally as large as thirty or forty acres. At intervals of fifteen or twenty minutes a column of liquid lava of great brilliancy, as large and as high as the Washington monument will be when it is completed, is shot upwards and falls back into the lava pool in a fiery spray. This grand display is sometimes kept up for months, and is generally terminated by an eruption. When an outbreak occurs it does not take place usually at the summit, but a fissure suddenly opens in the side of the mountain, out of which a sheet of lava spouts hundreds of feet into the air, and, falling, collects into a mighty river of fire half a mile in width, and rushes at first with great velocity down the slope. After running some miles it reaches

more level ground, where it spreads out in great lakes or fields. It also cools on the surface, which gradually freezes over. But it is still hot within, and beneath its hardened covering the liquid rivers are still running, and at the edges and along the front of the great sheet the limpid lava constantly breaks forth, pushing out fiery rivulets in advance, and laterally. These rivulets are shot out, in quick succession, here, there, and everywhere, gradually covering the ground by repeated offshoots. It soon blackens and hardens, but only to be covered by another and another batch. The later progress of the stream is slow. When the lava first leaves the vent it may run ten or fifteen miles an hour. But later on the stream may advance less than a hundred yards in a day. In November, 1880, a great eruption broke forth near the summit of Mauna Loa, and the lava poured out in heavy streams unceasingly for eleven months. There were three great streams flowing in as many directions, and the larger one extended from the vent a distance of nearly fifty miles. It reached the outskirts of the beautiful little town of Hilo, whose inhabitants had abandoned all hope that their village would escape, and had removed their portable property. But the flow stopped just at the edge of the village.

The massive and highly liquid character of the flows from Mauna Loa are the causes which have given this mountain its peculiar form. It is in contrast with all other volcanoes by virtue of its flat and gently-sloped profiles. It is a gently rising dome, whose slopes are only about ten degrees, while its longer ones are only four degrees. Most volcanoes have slopes ranging all the way from fifteen

degrees to thirty and even forty degrees. The liquid lavas run off from the summit and upper dome, and distribute themselves at immense distances. But if fragmental products were ejected in any quantity they would pile up around the orifices from which they were ejected, and thus form steep conical hills.

The ascent of Mauna Loa is a feat wholly unworthy of the name of mountaineering. It is necessary, however, to procure a guide who knows the way, otherwise the journey is pretty sure to prove more interesting than was expected. Many of the lava streams are masses of huge clinkers of the most angular and cruel aspect imaginable; indeed, the hummocks of an arctic ice field are good traveling in comparison; and only a guide familiar with the mountain knows how to avoid them.

Just east of Mauna Loa, about twenty or twenty-five miles, is the far-famed volcano Kilauea. This has been visited and described so often that little needs to be said here. It contains a great pit similar to that on Mauna Loa, and somewhat larger, though not so deep.

Within it are the great lakes of fire always burning. The lake at the summit of Mauna Loa is frozen over and silent, without a trace of volcanic activity, for several years at a time, and is open only for several months or sometimes a year or so before a great eruption. But at Kilauea the lava lakes are always aflame and have been so ever since the earliest traditions of the natives. Forty years ago there was a pit within a pit, and in the lowest deep was a lava pool half a mile or more in diameter always boiling, spouting, and flaming. At the present time the inner pit is

quite filled up with solid lava, and a large conical pile of rocks is built up over the site of this former lake. Within this pile of rocks, however, is the remnant of this lake, now about ten acres in area. Half a mile distant is a second lake which is easily visited, and it is an exhilarating sight to stand at night upon the brink of it and watch the boiling, surging, and swirling of six acres of melted lava. At brief intervals the surface darkens over by the formation of a black solid crust with streaks of fire around the edges. Suddenly a network of cracks shoots through the entire crust, and the fragments turn down edgewise and sink, leaving the pool one glowing expanse of exactly the appearance of so much melted cast-iron. The heat and fusion of this lake is maintained in spite of the enormous loss of heat by radiation by the constant ascent of large quantities of intensely hot vapors from the depths of the earth.

An hour's lecture, ladies and gentlemen, leaves no time for rhetoric and graceful transitions from one theme to another. Having shoveled out to you, so to speak, some incoherent remarks concerning points of special interest in the islands, I proceed at once to a subject, which will, I hope, prove more interesting, and that is the people who inhabit them.

When we were boys and girls our general idea of the inhabitants of the Pacific Islands was that they were typical savages. What savages were we knew pretty well, or thought we knew; for, had we not all read Robinson Crusoe? We thought of them as naked, black creatures, whose principal occupation was blowing conch shells, brandishing thigh bones, and dancing a horrible cancan around a fire where a

human carcass was roasting. But we were mistaken. The Polynesians, as a rule, were not savages, though many of the white people who first visited them were so.

In the Pacific Islands two very distinct races are found. Of one race the Hawaiians or Tahitians may be regarded as the type. This race peoples also the Society, Samoan, Navigators, and Friendly groups, and includes the Maoris of New Zealand. All these islanders have the same physical features, similar social cults, and speak dialects of the same language. The difference between the language of a Hawaiian and of a Society islander is not greater than that between the German and the Dutch. The difference between the language of a Hawaiian and a Maori is less than between the Dutch and the English. This and the community of physical type establishes the identity of race sufficiently. The western islands of the Pacific are occupied by a race which has such apparent affinity with the negritos of Papua or New Guinea as to raise a very strong presumption of their community, and the supposition is corroborated by many other circumstances. Of the two races, the first mentioned is much superior physically, mentally, and morally, and of all branches of that race the noblest is the Hawaiian.

Physically they are rather large, and have a light brown color, straight hair, and are handsomely formed, of good bearing, and well featured. The women also are pleasing and comely. There is nothing about them savoring of the squaw, hag, or wench, which is almost universal among so many of the primitive dark-skinned races, and they are not without beauty, even according to the taste of the white

man, if he is willing to admire a robust type of feminine grace as easily as he does the "pale, pious, pulmonary" persuasion. Among the Hawaiians the old kings and chiefs seemed to form a distinct caste and a breed greatly superior to the common herd. They were very large, and sometimes almost gigantic in size, and of very impressive form and bearing. Their color was lighter, and they were of more massive frames.

At the time of the discovery of these islands by Capt. Cook, in 1776, these people were by no means savages. Their social system was as much above savagery on the one hand as it was below civilization on the other. A careful study of their habits and customs discloses the very interesting fact that their social organization bore a striking similitude to that of Europe in the 10th and 11th centuries. It was a feudal system almost exactly. They had kings who were in all strictness hereditary suzerains. Under them were chiefs who owed them fealty, and who held lands and titles by a tenure which can hardly be distinguished from enfeoffment, and which, at all events, was a truly feudal tenure; for it carried with it the recognition of the principle that the allodium was vested in the king alone, and the tenure was granted to the chief as a vassal in consideration of military service. The common people were mere villeins, bound to the soil, though in some sort as tenants at will. The islands were divided up into several kingdoms, over each of which a king reigned, whose power was very absolute; in all things he was lord paramount. The kingdom was subdivided into tracts, for which the term now used in the islands is simply the word "lands." These

lands were lorded over by chiefs, of whom there were several grades. They were subdivided again and again down to the smallest holdings, of a fraction of an acre, tenanted by the lower classes, and all were marked off by metes and bounds.

The power of the king was absolute, and limited only by the endurance of his subjects. Life and death, as well as property, were subject to his will; and yet there was a division of power. To make the parallel with mediæval Europe more complete the power of the king was rivaled, and in some cases even overborne, by the power of a priesthood; and the priests enforced their sway with a spiritual weapon of resistless potency. The weapons of Rome were many, chief among which were excommunication, the inquisition, and the interdict. The Hawaiian priest had a weapon more powerful than them all. It was the tabu. This word has been adopted, metaphorically, into the English and many other languages. But few people comprehend its significance in the places where it originated. The word means prohibited or forbidden, and a great deal more besides. Almost anything might be tabu. The penalty of violating a tabu was always death. The institution derived its power from the fact that there was not a native in all Polynesia who did not devoutly believe that even if the king or priests did not cause him to be killed for violating a tabu the gods certainly would.

In respect to the arts possessed by these people they were few and simple. The islands contained no metals and very few substitutes for it, except stone, and not the best kinds of stone for implements at that. Considering the want of

materials, however, their arts were hardly to be despised. They made many articles of wood with surprising neatness. Their only substitutes for cloth were a fabric made of a peculiar bark, macerated in water and pounded out as thin as paper, and mats woven from the fibres of the pandanus with no little skill. Their houses were large, commodious structures made of grass, often neatly woven, and attached to a frame work of poles. They were scrupulously neat within, and matting of pleasing aspect was used abundantly. They were wonderfully expert fishermen, and had devices suited for capturing each kind of fish. More than that, they had fish-ponds and preserves for rearing select varieties.

Agriculture was practiced systematically. They constructed canals for irrigating, the remains of which are still visible in numerous places. Their chief vegetable was the root of the taro plant, a species of arum to which the callalilies belong. It may not be generally known that this is probably the most prolific food plant in the world. Humboldt gives that distinction to the banana, but the banana is nowhere in the comparison; for a square yard and a half planted with taro will yield food enough to support a man for a year. This plant is poisonous when raw, but cooking completely destroys the poisonous quality and renders it very wholesome. The Hawaiians first bake it and then pound it, gradually adding water, which is kneaded in like oil in a mayonnaise, and when fully prepared it is of a consistency very much like mayonnaise. In that state it is termed poi; and to this day the natives regard it as we do

bread, and it serves still as their favorite food. Many of the white residents also have become exceedingly fond of it.

The primitive Hawaiians were very bold and skillful navigators. There can be no question that they frequently visited in their little canoes the Society Islands and Tahiti, south of the equator, and 2,400 miles distant from Hawaii. How they could cross such vast wastes of ocean seems at first mysterious; but they had a knowledge of astronomy such as we sometimes marvel at in the old Egyptians and Chaldeans. They knew the planets and had names for the brighter stars. They also had a good calendar. Their year was 365 days long, and began when the Pleiades rose at sunset. They had twelve months, of which eleven had thirty days each, and the twelfth thirty-five days. They had also a primitive arithmetic and a system of numerals in which they could number up into the hundreds of thousands. It was partly decimal and partly tesseral.

The religion of this people was in some respects analogous to that of the Greeks. Their gods were hero gods, and of many grades. Indeed, it is quite literal to say that the woods were full of them. Every locality, every conspicuous rock or tree, had its tutelar, corresponding perhaps to the Grecian fauns and dryads. They also had animal gods, most notably the shark god, and the divinity of the volcano of Kilauea was a female named Pele. The amount of myth and legendary lore in which these divinities figured was something amazing. We have for some years been finding out that our own Indians were rich in myths, if nothing else. But the extent of such lore among the Hawaiians

quite surpasses anything known of other primitive peoples. Many of them are highly poetical and ingenious.

The origin of the Polynesian race has always been a mystery. There is very little light thrown upon it as yet by ethnological research. The view most favored is that they came from the East Indies at a remote period. That the larger islands of the Pacific have been inhabited for many centuries is an inference which finds considerable support. Attempts have been made to ascertain whether the language has any affinity to known languages of southeastern Asia, but the results are little better than negative. Some coincidences have been found, or supposed to have been found, but it does not seem that they are any better or more significant than such as may be frequently discovered between two languages which are surely known to have absolutely nothing in common. Coincidences between legends and customs have also been discovered. But ethnologists of the present day have come to attach less importance to them, if possible, than to languages. Thus the manners and customs, and also the legends, of the Maoris of New Zealand have very little in common with those of the Hawaiians. Yet the absolute identity of physical type and the virtual identity of their languages is tantamount to proof of a common race. And primitive peoples, world over, are constantly surprising us by furnishing correspondences in legends and peculiar customs, when it is absolutely certain that they are widely distinct. On the other hand, there is good ground for believing that if the Polynesians did not come from some known Asiatic or East Indian stock, they may at least have communicated with them in one way or

another. When the islands were discovered by Captain Cook pigs were very abundant there, and the animal was for all the world an East Indian variety. The peculiar tusks, the portentously long snout like an ichthyosaurus, and ears set in the middle of its body, give us pretty reliable testimony as to its origin. They also had dogs, and certainly no dog could have come either from America or Australia. Finally, and even more conclusively, they had common hens and chickens, which are certainly of Asiatic origin. What people brought these animals to the islands is a question. I have already mentioned to you that the Hawaiians often made voyages to Tahiti in their little canoes, a distance of 2,400 miles; and their ancient poems and legends are full of vague accounts of voyages to even greater distances. They knew of the Samoan and Tonga islands, which are more than 3,000 miles away and further westward. Possibly also they knew of New Zealand, but the evidence of that is not so clear. But I have never learned that anything in their poetry or traditions indicated a knowledge of either America or Asia. While therefore it is not impossible that they may have had communication with Asia, there is no other evidence of it than the fact that domestic animals of Asiatic origin were found among them.

The transition of this people from barbarism to civilization has been wonderfully rapid and complete. It is a very remarkable fact, too, that it is the only dark-skinned race that has ever been brought into full contact and relation with civilization, without war and generations of bloodshed, ending in subjugation. The reasons are many. Prominent

among them are the following: In the first place there can be little question that it is the finest and most intelligent race of dark-skinned people in the world. In the second place it is due in a great measure to the wisdom, tact, and good sense of the missionaries, through whom this civilization was imparted. But it seems to me that the third reason is still more potent, and this was the great ability, wisdom, and good sense of the kings of the line of the Kamehamehas and the absolute power they originally held over their people.

Fortunately also, at the time of the advent of white men, the control of the islands had already been consolidated into the hands of one man, who was fully capable of wielding it. If the lot of the first Kamehameha had been cast in Europe instead of the remotest islands of the sea, he would have figured as one of the conspicuous figures of history. Originally a little kinglet of a district at the north end of Hawaii, he gradually conquered the whole of that island, and finally the whole group. No king in history ever knew better how to rule his people. Brought into contact with civilization he grasped its meaning with a breadth of comprehension, which is perhaps without example among barbarians. He knew instinctively how resistless was its power, and how inexorably it crowds the weaker races to the wall. But he had the wisdom, not only to avert the destruction of his own power and the obliteration of the nationality of his people, but actually to draw strength from it, and make it his servant instead of his master. The greatest achievement of his life was the work of his declining years, and it was an achievement of surpassing skill. He

broke completely the secular power of the priesthood. He had the sagacity to discover alone and unaided the grandest truth in political science, and one which white men never discovered until three or four centuries ago. That great truth was that Church and State had better let each other alone. We need not wonder, however, that he discovered it, for the kings of Europe understood it well enough; indeed they were about the only ones who did. The marvel was that this barbarian should have had the courage and address to make the truth a practical reality, and put it into execution. It is one thing to perceive the foolishness of superstition, and quite another to break down a whole religion. When Kamehameha began his career the priesthood was far more powerful than he. When he died they were as powerless in secular matters as the Pope now is in Italy. The finishing stroke was given when his dead body, as yet unburied, was awaiting the obsequies. His widow and son deliberately broke many of the most sacred tabus, and enjoined the same sacrilegious acts upon their households and followers. They were promptly obeyed, and the example was followed by the whole nation. Next the temples were despoiled, the images of the gods broken and burned, and the priests themselves driven into the forests and jungles.

An act so sweeping and revolutionary as the trampling under foot of the most binding superstition or religious conviction that ever held sway over the human race, would never have been ventured, if the people had not been gradually wrought up to it. In truth, Kamehameha had first revolutionized the whole social and political condition

of his people, and had elevated them immensely against the influences of a priestcraft which was all the time striving to hold them down. When the issue came the King triumphed, and the priest was overthrown. It was probably this change which prepared the Hawaiian people for what followed. It established the kingly power independently of a priesthood, and left the people without a religion.

The year following this important event the missionaries landed there for the first time. They soon secured the good will of the second Kamehameha, and found their work a comparatively easy one. To the missionaries is due the credit of having been the agents through whom civilization was imparted to the islands. Those who are specially devoted to the interests of foreign missions have been in the habit of regarding the Hawaiian Islands as a signal instance of the triumph of Protestant propagandism. On the whole, there is a large measure of justice in this claim. But, on the other hand, a closer view will probably disclose to the impartial mind the fact that, while the amount of Christian proselytism has been very considerable, the outside view of it is somewhat overdrawn. There are certainly many devout Christians among the Hawaiians, but there are also many who cherish their old religion, and the greater part of them are more or less tinctured with their ancient superstitions. But whatever doubts may arise as to the complete success of the propaganda, there can be none as to their success in imparting civilization. Fortunately they had to deal with and through a succession of kings who were men of pre-eminent sense and of practical wisdom, and who knew how to manage their subjects.

They were kings in the best possible signification. Royalty was inborn in them, and the loyalty of their subjects was such that the loyalty of an Englishman is a feeble sentiment in comparison. The Kamehamehas, from the II to to V, inclusive, were quick to recognize the advantages of civilization, and had wonderful tact in discriminating between good and bad advice. The missionaries proved to be discreet and judicious advisers, and gradually the transition from barbarism to civilization was effected safely, step by step; the government was transformed into a constitutional monarchy, the feudal tenure of lands was changed to fee simple. Statute laws were enacted and codified, and suffrage was made as broad and liberal as in America. Perhaps the most important step was compulsory education, which is provided for by the State, and to-day it is hard to find a native who cannot read, write, and cipher.

The economic condition of the Hawaiian is probably superior at the present time to that of any other tropical people in the world; and, on the whole, I think it quite safe to say that it is but very little surpassed, if at all, by that of the working classes of America. He has even more to eat and better food, plenty of beef, pork, and fish, and could have an abundance of flour if he desired it, but he prefers his taro. He owns his property in fee; he makes laws and executes them; he reads and writes; he has but one wife; he tills the soil and tends flocks; sometimes he accumulates wealth, and sometimes he does not; he makes his will in due form, dies and receives a Christian burial. In no land in the world is property more secure. Indeed, I have yet to learn of any where it is equally secure from burglary,

rapine, and thievery or those subtler devices by which the cunning get possession of the property of the less astute without giving an equivalent for it. The few relics of barbarism remaining are of the most harmless description, and probably quite as good for him as anything he might adopt in place of them.

Unfortunately the population is rapidly decreasing. A century ago a fair estimate would probably have been over 150,000. To-day the native population is 45,000 to 50,000. The causes of this decrease are many. It has usually been attributed to diseases brought by contact with the whites. While it is indisputable that such diseases have in a measure contributed to the result, I believe there is still another cause at work tending to the same result, which is as follows: The Hawaiian is the most amiable and social creature in the world. Life without plenty of society is intolerable to him. He is also fond of display—of giving feasts, of treating, and extravagantly fond of dress, horses, and sport. His instinct is to leave the country and crowd into the towns. This is as common among the women as among the men. But to live in town, or to indulge in dissipation, requires money, and therefore a family is a burden, especially to women, who are so fond of gaiety. There is, therefore, a deliberate and willful curtailment of the birth-rate; and in my judgment this has been not much less potent in reducing the population than the abnormal increase in the death-rate.

The government of the islands is now a constitutional monarchy. The king is the chief executive officer, and his powers, though in theory no greater than those of the

English sovereign, are in reality much more extensive and effectual. The legislative branch consists of a representative assembly elected biennially by the people, and a house of nobles limited by the constitution to twenty members. The nobles are appointed for life by the king, but their titles are not hereditary. The judiciary is organized upon a plan somewhat similar to that of New York State, though considerably simpler. At the head of the judicial branch is the chief justice or chancellor and two vice-chancellors, who perform the functions of a supreme court and final court of appeals. They have also original jurisdiction in a wide range of subjects, and indeed in almost all important cases of whatsoever nature. Each of these justices holds circuit courts in various parts of the kingdom, at which cases are tried both originally and on appeal. There are also lower courts in which petty cases are tried, and in which more important ones may originate. The higher judges are white men truly learned in the law, and they have reflected honor upon their profession and upon their adopted country. All of them are Americans, and received their education and training in law in the United States. The primary judges are in some cases whites, in others natives. The native judges were formerly appointed by the chancellor, but are now appointed by the crown. There is generally much difficulty in finding men of native birth who possess the requisite legal knowledge and experience. Their intentions are always of the best, but their tendency is to construe law in accordance with their own notions of abstract justice rather than upon legal principles, and few of them are capable as yet of under-

standing the value and significance of precedents. But the higher courts are always open to appeal. The administration of law is excellent, and will on the whole compare favorably with any country in the world. The respect of the native for statute law is very great, and the sheriff, policeman, or tax gatherer, has no more difficulty in executing his process than in England or Massachusetts; indeed, he has, if anything, less difficulty.

The statutory code is in general modeled after that of New York, though it is apparent that in matters of detail many minor differences were at the first and still are necessary. But the underlying principles are identical. The tenure of real estate, the laws relating to liens and mortgages, to wills and inheritance of property, to bankruptcy and debt, to marriage and divorce, to partnership and corporations, are founded upon those of New York State. The system of jurisprudence is also fundamentally the same. There are many differences of detail and these are sometimes wide, but never so wide as to constitute differences of principle. The processes of the courts are more frequently summary, and their action is much more speedy and direct. Devices for protracting and complicating litigation have not as yet been developed to any great extent.

All laws are enacted by the legislature, which regulates taxation and customs, and appropriates specifically for all public expenditures. In theory the powers of this body are very nearly the same in their broader features as those of one of our State legislatures. The members of the lower house are elected biennially and are mostly natives. In practice, however, there is a wide difference. In England